354. (New) An antibody or antigen-binding fragment thereof having binding specificity for a C-C chemokine receptor 3 protein that is expressed on the surface of a cell, wherein said C-C chemokine receptor 3 protein comprises the amino acid sequence of SEQ ID NO:4.

355. (New) An antibody or antigen-binding fragment thereof having binding specificity for a C-C chemokine receptor 3 protein that is expressed on the surface of a cell, wherein said C-C chemokine receptor 3 protein is encoded by SEQ ID NO:1 or SEQ ID NO:5.

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356. (New) An antibody or antigen-binding fragment thereof having binding specificity for a C-C chemokine receptor 3 protein that is expressed on the surface of a cell, wherein said C-C chemokine receptor 3 protein is encoded by SEQ ID NO:3.

REMARKS

Claims 221-245 and 267-291 have been cancelled. Claims 151-157, 163-169, 175-179, 185-188, 194-198, 204-207, 213, 217, 246-250, 253, 257-260, 263, 292, 296, 300 and 303 have been amended, and new Claims 308-356 have been added to the application. Claims 151-220, 246-266 and 292-356 are pending.

The claims have been amended to delete "having binding specificity for" and insert therefor "that specifically binds." The claims have been further amended to delete "naturally-occurring mammalian," "naturally-occurring" and "mammalian."

Support for the amended claims is found throughout the application as filed, for example, at page 35, lines 28-30.

Support for new Claim 308-356, which recite that the antibodies or antigen-binding fragments thereof having binding specificity for a C-C chemokine receptor 3 protein that is expressed on the surface of a cell, is found, for example, at page 36, lines 28-32; page 38, lines 28-33; page 41, lines 9-16; and page 60 line 30 through page 61, line 28.

The amended claims and new claims are supported by the application as filed. Therefore, this Amendment adds no new matter.

Further remarks which address the rejections made in the Office Action are set forth below.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 151-307 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. In particular, the Examiner states that Claims 151-154, 157, 163, 165, 169, 175, 176, 179, 185, 188, 195, 198, 204, 205, 207, 213, 217, 221-224, 227, 230, 234-239, 242, 246, 247, 250, 253, 257, 258, 263, 267-270, 273, 276, 280, 282, 283, 288, 292 and 296 are indefinite in the recitation of "naturally occurring."

The amended claims no longer recite "naturally occurring." Thus, the rejection is obviated.

Rejections under 35 U.S.C. § 103(a)

I. Horuk et al. (WO 94/11504) in view of Queen et al. (U.S. Patent No. 5,530,101)

Claims 151-154, 156-166, 168-176, 178-195, 197-224, 226-247, 249-270, 272-299 and 303-307 are rejected under 35 U.S.C. § 103(a) as being obvious over Horuk *et al.* (WO 94/11504) in view of Queen *et al.* (U.S. Patent No. 5,530,101).

The Examiner states that Horuk *et al.* teaches the cloning of the C-C chemokine receptor CKR-1, polyclonal and monoclonal antibodies that bind CKR-1, and hybridoma production. (Office Action at page 3, lines 21-23.) The Examiner further states that the polynucleotide that encodes CKR-1 would hybridize to SEQ ID NO:3 or 5 under the conditions recited in the rejected claims, and that CKR-1 binds RANTES and other ligands. (Office Action at page 4, lines 4-8.)

The Examiner provides Sequence Comparison A and Sequence Comparison B which show that the CKR-1 disclosed by Horuk *et al.* contains a 41 amino acid region that is also found in SEQ ID NO:4 and SEQ ID NO:6. Based upon this region of amino acid sequence identity, the Examiner concludes that the antibodies disclosed by Horuk *et al.* would bind SEQ ID NO:4 or SEQ ID NO:6, and that they would compete with other antibodies for binding to SEQ ID NO:4

or SEQ ID NO:6, because they would be competing for the same binding site. (Office Action at page 3, line 24 through page 4, line 4.)

The Examiner acknowledges that Horuk *et al.* does not teach humanized antibodies, chimeric antibodies or antigen-binding fragments. (Office Action at page 4, lines 7-8.)

The Examiner states that Queen *et al.* teach methods for preparing humanized immunoglobulin chains, and that binding fragments of immunoglobulins and other immunoglobulin forms can be readily produced using recombinant DNA or other techniques. (Office Action at page 4, lines 9-16.) The Examiner states that it would have been obvious at the time the invention was made to produce humanized or chimeric antibodies that bind CKR-1 and the person of skill in the art would have been motivated to do so, because Queen *et al.* teaches that there is a need for human-like immunoglobulins that are substantially non-immunogenic in humans. (Office Action at page 4, lines 16-22.)

Claims 221-224, 226-245, 267-270 and 272-291 have been cancelled, obviating the rejection with respect to these claims.

Claim 303 recites that the antibody or antigen-binding fragment thereof has binding specificity for a C-C chemokine receptor 3, and comprises the light chain CDRs and heavy chain CDRs of monoclonal antibody 7B11. The 7B11 hybridoma was deposited at the American Type Culture Collection (ATCC) under the provisions of the Budapest Treaty and is readily accessible. In addition, the specification teaches that monoclonal antibody 7B11 does not have binding specificity for C-C chemokine receptor 1 (CCR1, CKR-1) expressed on transfected L1.2 cells. (Specification at 117, lines 12-16.) Neither Horuk *et al.* nor Queen *et al.* teach monoclonal antibody 7B11 or the amino acid sequences of the light chain and heavy chain CDRs of monoclonal antibody 7B11. Therefore, Claim 303 and dependent Claims 304-307 are not obvious over Horuk *et al.* in view of Queen *et al.*, because the cited references fail to suggest the particular antibodies, compositions or isolated cells that are claimed, or to provide a reasonable expectation of success in producing these particular antibodies, compositions or cells.

Claims 151, 163, 175, 185, 194, 204, 213, 217, 246, 257, 292 and 296, as amended, recite that the antibody or antigen-binding fragment "specifically binds" a C-C chemokine receptor 3 protein. The invention of these claims and of dependent Claims 152-154, 156-162, 164-166, 168-174, 176, 178-184, 186-193, 195, 197-203, 205-212, 214-216, 218-220, 247, 249-256, 258-266, 293-295 and 297-299 are not obvious, because even if it were possible to produce an antibody that fortuitously bound CKR-1 and SEQ ID NO:4 or SEQ ID NO:6 by following the teachings of Horuk *et al.*, such an antibody (which binds CKR-1) would not specifically bind a C-C chemokine receptor 3 in accordance with the claims. Queen *et al.* does not teach an antibody that binds a C-C chemokine receptor 3 and, therefore, does not remedy the deficiency in the teachings of Horuk *et al.*

Reconsideration and withdrawal of the rejection are requested.

II. Charo et al. (U.S. Patent No. 5,707,815) in view of Queen et al. (U.S. Patent No. 5,530,101)

Claims 151, 155, 157-162, 167, 175-177, 179-184, 194-196, 198-203, 212-216, 221-225, 228-223, 238-241, 246-248, 250-256, 259-262, 267-271, 273-279, 284-287, 292-295 and 303-307 are rejected under 35 U.S.C. § 103(a) as being obvious over Charo *et al.* (U.S. Patent No. 5,707,815) in view of Queen *et al.* (U.S. Patent No. 5,530,101).

In the statement of rejection, the Examiner indicates that Claims 228-**223** are rejected. This appears to be a typographical error, and the rejection is treated as including Claims 228-**233**. If the rejection is maintained, the Examiner is requested to confirm that the rejection includes Claims 228-233.

The Examiner states that Charo *et al.* discloses human chemokine receptor proteins MCP-1RA and MCP-1RB and antibodies that bind the receptors. (Office Action at page 5, lines 5-8.) The Examiner further states that the polynucleotide that encodes MCP-1RA and MCP-1RB would hybridize to SEQ ID NO:3 under the conditions recited in the rejected claims. (Office Action at page 5, lines 10-11.)

The Examiner provides Sequence Comparison C which shows that the MCP-1RA and the MCP-1RB disclosed by Charo *et al.* contain a 22 amino acid region that is also found in SEQ ID NO:2. Based upon this region of amino acid sequence identity, the Examiner concludes that the

antibodies disclosed by Charo *et al.* would bind SEQ ID NO:2. (Office Action at page 5, lines 8-10.)

The Examiner acknowledges that Charo *et al.* does not teach humanized antibodies, chimeric antibodies or antigen-binding fragments, and cites Queen *et al.* for the same reasons discussed above. (Office Action at page 5, line 9 *et seq.*)

Claims 221-225, 228-233, 238-241, 267-271, 273-279 and 284-287 have been cancelled, obviating the rejection with respect to these claims.

Claim 303 recites that the antibody or antigen-binding fragment thereof has binding specificity for a C-C chemokine receptor 3, and comprises the light chain CDRs and heavy chain CDRs of monoclonal antibody 7B11. The 7B11 hybridoma was deposited at the ATCC under the provisions of the Budapest Treaty and is readily accessible. In addition, the specification teaches that monoclonal antibody 7B11 does not have binding specificity for C-C chemokine receptor 2b (CCR2b, MCP-1RB) expressed on transfected L1.2 cells. (Specification at 117, lines 12-16.) Neither Charo *et al.* nor Queen *et al.* teach monoclonal antibody 7B11 or the amino acid sequences of the light chain and heavy chain CDRs of monoclonal antibody 7B11. Therefore, Claim 303 and dependent Claims 304-307 are not obvious over Charo *et al.* in view of Queen *et al.*, because the cited references fail to suggest the particular antibodies, compositions or isolated cells that are claimed, or to provide a reasonable expectation of success in producing these particular antibodies, compositions or cells.

Claims 151, 155, 157-162, 167, 175-177, 179-184, 194-196, 198-203, 212-216, 246-248, 250-256, 259-262 and 292-295, as amended, recite or depend from claims which recite that the antibody or antigen-binding fragment "specifically binds" a C-C chemokine receptor 3 protein. These claims are not obvious, because even if it were possible to produce an antibody that fortuitously bound MCP-1RA, MCP-1RB and SEQ ID NO:2 by following the teachings of Charo *et al.*, such an antibody would not specifically bind a C-C chemokine receptor 3 in accordance with the claims. Queen *et al.* does not teach an antibody that binds a C-C chemokine receptor 3

and, therefore, does not remedy the deficiency in the teachings of Charo *et al.* Reconsideration and withdrawal of the rejection are requested.

New Claims 308-356

New Claims 308-356, which recite that the antibodies or antigen-binding fragments thereof have binding specificity for a C-C chemokine receptor 3 protein that is expressed on the surface of a cell, are not obvious over the teachings of any of the references of record. None of the references, alone or in any combination, teach or suggest the amino acid sequence of a C-C chemokine receptor 3, or the claimed antibodies, antigen-binding fragments, isolated cells or compositions. Also, none or the references of record, alone or in any combination, provide a reasonable expectation of success in producing the claimed antibodies, antigen-binding fragments, isolated cells or compositions.

The record demonstrates that certain C-C chemokine receptors (e.g., CCR1 (CKR-1) and CCR2 (CKR2, MCP-1RA, MCP-1RB)) contain regions of limited amino acid sequence identity, such as the "DRYLAIVHA motif" disclosed by Applicants and identified by the Examiner in Sequence Comparisons A, B and C. (Specification at page 14, line 33 through page 15, line 3.) However, the new claims are not obvious due to the possibility that an antibody that binds such a conserved region in CCR1 or CCR2 might also bind that region in CCR3, because the regions of limited sequence identity are found in the transmembrane and intracytoplasmic domains of the proteins. For example, Charo *et al.* teaches that the conserved sequences NLAISDL and DRYLAIV are found in the second and third transmembrane domains of the MIP-1α/RANTES receptor, the IL-8 receptor and the HUMSTER receptor. (Charo *et al.* at column 17, line 64 through column 18, line 4.) Charo *et al.* further teaches that the "[a] striking identity between the MCP-1A receptor and the MIP-1α/RANTES receptor is found in the sequence IFFIILLTI DRYLAIV HAVFAL(K/R) ARTVTFGV (SEQ ID NOS: 13 and 14), which occurs at the end of the third transmembrane domain." (Charo *et al.* at column 21, lines 44-48.)

The Examiner's attention is also directed to the annotated copy of the alignment of SEQ ID NO:2 and the amino acid sequence of MCP-1RB (CCR2B) reported by Yamagami *et al.* provided as an Exhibit to the Second Preliminary Amendment filed on September 26, 2000. The annotated alignment shows the predicted extracellular regions (EC1-EC4), predicted

transmembrane regions (TM1-TM7) and predicted intracellular regions (IC1-IC4) identified in accordance with the teachings of Yamagami *et al.* (see, Yamagami *et al.* at Figure 1; predicted extracellular, transmembrane and intracellular regions are labeled and predicted transmembrane and cytoplasmic domains are highlighted). That alignment further demonstrates that any regions of limited sequence identity are contained within the transmembrane and/or intracellular domains.

Amino acid sequences that are within the transmembrane or intracytoplasmic domains of a chemokine receptor are not available for antibody (or antigen-binding fragment thereof) binding when the chemokine receptor is expressed on the surface of a cell, and antibodies (or antigen-binding fragment thereof) that have binding specificity for such regions would not bind to a C-C chemokine receptor 3 protein that is expressed on the surface of a cell. Therefore, the subject matter of the new claims is not obvious, because no references of record (alone or in any combination) suggest antibodies or antigen-binding fragments thereof that have binding specificity for a C-C chemokine receptor 3 protein that is expressed on the surface of a cell, or provide a reasonable expectation of success in producing such an antibody or antigen-binding fragment. Additionally, there is no scientific basis to conclude that an antibody or antigen-binding fragment that binds an epitope in a transmembrane or intracytoplasmic domain of a chemokine receptor would bind a C-C chemokine receptor 3 protein that is expressed on the surface of a cell.

Information Disclosure Statement

A Supplemental Information Disclosure Statement (SIDS) is being filed concurrently herewith. Acknowledgment of consideration of the information provided in the SIDS is respectfully requested in the next Office Communication.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 341-0036.

Respectfully submitted,

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MARKED UP VERSION OF AMENDMENTS

Claim Amendments Under 37 C.F.R. § 1.121(c)(1)(ii)

Claims 221-245 and 267-291 have been cancelled. Claims 151-157, 163-169, 175-179, 185-188, 194-198, 204-207, 213, 217, 246-250, 253, 257-260, 263, 292, 296, 300 and 303 have been amended, and new Claims 308-356 have been added to the application.

151. (Amended) An antibody or antigen-binding fragment thereof that specifically binds [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has at least 90% amino acid sequence identity with SEQ ID NO:2 or SEQ ID NO:6 and has binding specificity for a chemokine selected from the group consisting of RANTES and MCP-3.

152. (Amended) The antibody or antigen-binding fragment of Claim 151, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has binding specificity for RANTES.

153. (Amended) The antibody or antigen-binding fragment of Claim 151, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has binding specificity for MCP-3.

154. (Amended) The antibody or antigen-binding fragment of Claim 151, wherein said antibody or antigen-binding fragment inhibits binding of a ligand to said [naturally-occurring mammalian] C-C chemokine receptor 3 protein.

155. (Amended) The antibody or antigen-binding fragment of Claim 151, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:2.

156. (Amended) The antibody or antigen-binding fragment of Claim 151, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:4.

157. (Amended) The antibody or antigen-binding fragment of Claim 151, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is a [naturally-occurring] human C-C chemokine receptor 3 protein.

163. (Amended) An antibody or antigen-binding fragment thereof that specifically binds [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has at least 90% amino acid sequence identity with SEQ ID NO:4 and has binding specificity for a chemokine selected from the group consisting of RANTES and MCP-3.

164. (Amended) The antibody or antigen-binding fragment of Claim 163, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has binding specificity for RANTES.

165. (Amended) The antibody or antigen-binding fragment of Claim 163, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has binding specificity for MCP-3.

166. (Amended) The antibody or antigen-binding fragment of Claim 163, wherein said antibody or antigen-binding fragment inhibits binding of a ligand to said [naturally-occurring mammalian] C-C chemokine receptor 3 protein.

167. (Amended) The antibody or antigen-binding fragment of Claim 163, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:2.

168. (Amended) The antibody or antigen-binding fragment of Claim 163, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:4.

169. (Amended) The antibody or antigen-binding fragment of Claim 163, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is a [naturally-occurring] human C-C chemokine receptor 3 protein.

175. (Amended) An antibody or antigen-binding fragment thereof <u>that specifically binds</u> [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has at least 90% amino acid sequence identity with SEQ ID NO:2 or SEQ ID NO:6 and has binding specificity for eotaxin.

176. (Amended) The antibody or antigen-binding fragment of Claim 175, wherein said antibody or antigen-binding fragment inhibits binding of a ligand to said [naturally-occurring mammalian] C-C chemokine receptor 3 protein.

177. (Amended) The antibody or antigen-binding fragment of Claim 175, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:2.

178. (Amended) The antibody or antigen-binding fragment of Claim 175, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:4.

179. (Amended) The antibody or antigen-binding fragment of Claim 175, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is a [naturally-occurring] human C-C chemokine receptor 3 protein.

185. (Amended) An antibody or antigen-binding fragment thereof that specifically binds [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has at least 90% amino acid sequence identity with SEQ ID NO:4 and has binding specificity for eotaxin.

186. (Amended) The antibody or antigen-binding fragment of Claim 185, wherein said antibody or antigen-binding fragment inhibits binding of a ligand to said [naturally-occurring mammalian] C-C chemokine receptor 3 protein.

187. (Amended) The antibody or antigen-binding fragment of Claim 185, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:2 or the amino acid sequence of SEQ ID NO:4.

188. (Amended) The antibody or antigen-binding fragment of Claim 185, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is a [naturally-occurring] human C-C chemokine receptor 3 protein.

194. (Amended) An antibody or antigen-binding fragment thereof that specifically binds [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has at least 90% amino acid sequence identity with SEQ ID NO:2 or SEQ ID NO:6 and has binding specificity for a chemokine selected from the group consisting of MCP-2 and MCP-4.

195. (Amended) The antibody or antigen-binding fragment of Claim 194, wherein said antibody or antigen-binding fragment inhibits binding of a ligand to said [naturally-occurring mammalian] C-C chemokine receptor 3 protein.

196. (Amended) The antibody or antigen-binding fragment of Claim 194, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:2.

197. (Amended) The antibody or antigen-binding fragment of Claim 194, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:4.

198. (Amended) The antibody or antigen-binding fragment of Claim 194, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is a [naturally-occurring] human C-C chemokine receptor 3 protein.

204. (Amended) An antibody or antigen-binding fragment thereof <u>that specifically binds</u> [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein has at least 90% amino acid sequence identity with SEQ ID NO:4 and has binding specificity for a chemokine selected from the group consisting of MCP-2 and MCP-4.

205. (Amended) The antibody or antigen-binding fragment of Claim 204, wherein said antibody or antigen-binding fragment inhibits binding of a ligand to said [naturally-occurring mammalian] C-C chemokine receptor 3 protein.

206. (Amended) The antibody or antigen-binding fragment of Claim 204, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession

No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:2 or the amino acid sequence of SEQ ID NO:4.

207. (Amended) The antibody or antigen-binding fragment of Claim 204, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is a [naturally-occurring] human C-C chemokine receptor 3 protein.

213. (Amended) An antibody or antigen-binding fragment thereof that specifically binds [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein comprises the amino acid sequence of SEQ ID NO:2 or SEQ ID NO:6.

217. (Amended) An antibody or antigen-binding fragment thereof that specifically binds [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein comprises the amino acid sequence of SEQ ID NO:4.

246. (Amended) An antibody or antigen-binding fragment thereof that specifically binds [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is encoded by a nucleic acid that hybridizes to a second nucleic acid consisting of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:5, the complement of SEQ ID NO: 1 [and] or the complement of SEQ ID NO:5 under hybridization conditions of 50% formamide, 5X SSC, 1X Denhardt's solution, 10% dextran sulfate, 20 mM Tris(hydroxymethyl)aminomethane pH 7.5 and 1% SDS at 42°C, and wash conditions of 2X SSC/0.1% SDS at 42°C, and has binding specificity for eotaxin.

247. (Amended) The antibody or antigen-binding fragment of Claim 246, wherein said antibody or antigen-binding fragment inhibits binding of a ligand to said [naturally-occurring mammalian] C-C chemokine receptor 3 protein.

248. (Amended) The antibody or antigen-binding fragment of Claim 246, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:2.

249. (Amended) The antibody or antigen-binding fragment of Claim 246, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:4.

250. (Amended) The antibody or antigen-binding fragment of Claim 246, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is a [naturally-occurring] human C-C chemokine receptor 3 protein.

253. (Amended) The antibody or antigen-binding fragment of Claim 246, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is encoded by a nucleic acid that hybridizes to a second nucleic acid consisting of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:5, the complement of SEQ ID NO:1 or the complement of SEQ ID NO:5 under hybridization conditions of 6X SSC containing 5X Denhardt's solution, 10% (w/v) dextran sulfate, 2% SDS and sheared salmon sperm DNA (100 μg/mL) at 65°C and wash conditions of 0.2X SSC, 0.5% SDS at 65°C, and has binding specificity for eotaxin.

257. (Amended) An antibody or antigen-binding fragment thereof <u>that specifically binds</u> [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is encoded by a nucleic acid that hybridizes to a second nucleic acid consisting of the nucleotide sequence of SEQ ID NO:3 or the complement of SEQ ID NO:3 under hybridization conditions of 50% formamide, 5X SSC, 1X Denhardt's solution, 10% dextran sulfate, 20 mM Tris(hydroxymethyl)aminomethane pH 7.5 and 1% SDS at 42°C, and wash conditions of 2X SSC/0.1% SDS at 42°C, and has binding specificity for eotaxin.

258. (Amended) The antibody or antigen-binding fragment of Claim 257, wherein said antibody or antigen-binding fragment inhibits binding of a ligand to said [naturally-occurring mammalian] C-C chemokine receptor 3 protein.

259. (Amended) The antibody or antigen-binding fragment of Claim 257, wherein said antibody or antigen-binding fragment can compete with monoclonal antibody 7B11 (ATCC Accession No. HB-12195) for binding to a [mammalian] C-C chemokine receptor 3 protein comprising the amino acid sequence of SEQ ID NO:2 or the amino acid sequence of SEQ ID NO:4.

260. (Amended) The antibody or antigen-binding fragment of Claim 257, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is a [naturally-occurring] human C-C chemokine receptor 3 protein.

263. (Amended) The antibody or antigen-binding fragment of Claim 257, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is encoded by a nucleic acid that hybridizes to a second nucleic acid consisting of the nucleotide sequence of SEQ ID NO:3 or the complement of SEQ ID NO:3 under hybridization conditions of 6X SSC containing 5X Denhardt's solution, 10% (w/v) dextran sulfate, 2% SDS and sheared salmon sperm DNA (100 μg/mL) at 65°C and wash conditions of 0.2X SSC, 0.5% SDS at 65°C, and has binding specificity for eotaxin.

292. (Amended) An antibody or antigen-binding fragment thereof <u>that specifically binds</u> [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is encoded by SEQ ID NO:1 or SEQ ID NO:5.

296. (Amended) An antibody or antigen-binding fragment thereof <u>that specifically binds</u> [having binding specificity for] a [naturally-occurring mammalian] C-C chemokine receptor 3 protein, wherein said [naturally-occurring mammalian] C-C chemokine receptor 3 protein is encoded by SEQ ID NO:3.

300. (Amended) Antibody 7B11 (ATCC Accession No. HB-12195) or an antigen-binding fragment thereof.

303. (Amended) An antibody or antigen-binding fragment thereof having binding specificity for a [naturally-occurring mammalian] C-C chemokine receptor 3, wherein said antibody or antigen-binding fragment comprises the light chain CDRs (CDR1, CDR2 and CDR3) and the heavy chain CDRs (CDR1, CDR2 and CDR3) of monoclonal antibody 7B11 (ATCC Accession No. HB-12195).